



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,306	03/12/2004	Roger W. Engelbart	7784-000624	8142

27572 7590 10/18/2004

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

EXAMINER

JARRETT, RYAN A

ART UNIT	PAPER NUMBER
----------	--------------

2125

DATE MAILED: 10/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/799,306	Applicant(s) ENGELBAR ET AL	
	Examiner Ryan A. Jarrett	Art Unit 2125	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 24-26 is/are rejected.
- 7) ☒ Claim(s) 21-23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/12/4/26/7/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 7, 13, and 21 are objected to because of the following informalities:

Appropriate correction is required.

In claim 7 line 5, "the" should be replaced with "a".

In claim 13 line 4, "the" should be replaced with "a".

In claim 21 line 3, "the" should be replaced with "a".

In claim 26 line 2, the first instance of "the" should be replaced with "a".

In claim 33 line 2, the first instance of "the" should be replaced with "a".

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 25-36 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are directed to a program not tangibly embodied on or in some form of computer readable medium.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2125

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-14, 16-20, 24-26, and 28-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Lin et al. U.S. Patent No. 6,205,239. For example, Lin et al. discloses a method enabling automated repair of defects with a material placement machine, the method comprising: inspecting a composite structure for defects; determining whether a defect detected by the inspecting is unacceptable; determining whether a defect detected by the inspecting is repairable by the material placement machine without user intervention; and automatically causing the material placement machine to return to and place material sufficient for repairing a defect determined to be unacceptable and repairable by the material placement machine without user intervention; automatically causing the material placement machine to return to each defect determined to be unacceptable (e.g., col. 2 lines 30-39, col. 7 lines 10-27, col. 22 line 65 – col. 24 line 67);

wherein the automatically causing includes electronically accessing positional data defining a location of a defect (e.g., col. 5 lines 30-32, col. 8 lines 32-54, col. 10 lines 50-63);

wherein the automatically causing includes creating a program to automatically generate instructions for causing the material placement machine to return to and place material sufficient for repairing defects determined to be unacceptable and repairable by

the material placement machine without user intervention (e.g., col. 22 line 65 – col. 24 line 67);

wherein the method includes communicating with an inspection system performing the inspecting (e.g., col. 22 line 65 – col. 24 line 67);

exterior monitoring of the material application position of the material placement machine to determine a location of a defect detected by the inspecting (e.g., col. 5 lines 30-32, col. 8 lines 32-54, col. 10 lines 50-63, col. 22 line 65 – col. 24 line 67);

wherein the program extracts the positional data from a first file to a second file and generates the instructions within the second file (e.g., col. 17 lines 1-15, col. 23 line 43 – col. 24 line 22).

6. Claims 13-15, 25, and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Holmes et al. U.S. Patent No. 6,799,619. Holmes et al. Discloses a method comprising: electronically accessing positional data defining a defect location on a composite structure; and automatically causing a material placement machine to return to the defect location as defined by the positional data; wherein the automatically causing includes automatically causing the material placement machine to place material sufficient for repairing a defect at the defect location; wherein the automatically causing includes automatically causing the material placement machine, after completing a ply of the composite structure, to return to a course of the ply in which a defect is located and place material along the course sufficient for repairing the defect (e.g., col. 6 line 4 – col. 7 line 23, col. 8 lines 23-36).

Allowable Subject Matter

7. Claims 21-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to teach or fairly suggest exterior monitoring of a material application position of a material placement machine to determine a first distance from a first reference point of a composite structure to a defect; wherein the monitoring includes detecting and counting transitions between contrasting portions of a code ring coupled for common rotation with a compaction roller, in combination with the remaining features and elements of the claimed invention.

The prior art of record fails to teach or fairly suggest exterior monitoring of a material application position of a material placement machine to determine a first distance from a first reference point of a composite structure to a defect; further comprising summing courses completed to produce a total completed course count; and multiplying a predetermined course width by the total completed course count to determine a second distance from a second reference point of the composite structure to the defect, in combination with the remaining features and elements of the claimed invention.

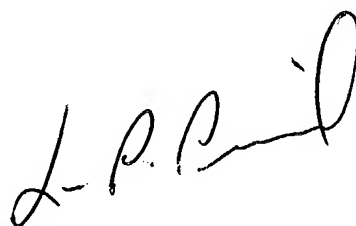
Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan A. Jarrett whose telephone number is (703) 308-4739. The examiner can normally be reached on 10:00-6:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on (703) 308-0538. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

10/8/04



Ryan A. Jarrett
Examiner
Art Unit 2125

LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100